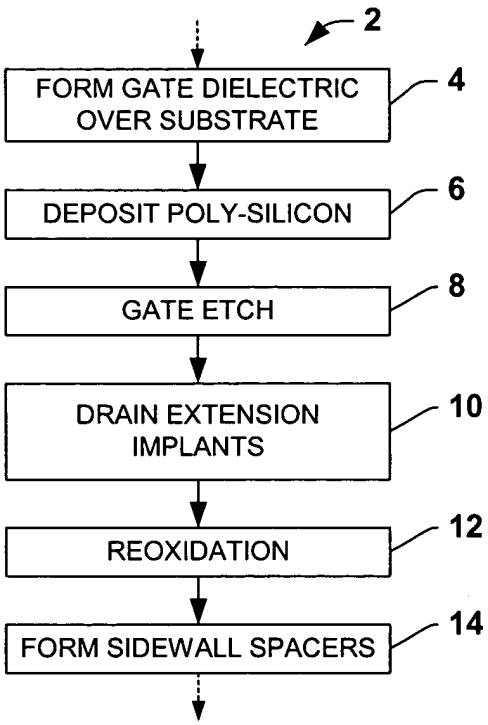

FIG. 1
(PRIOR ART)

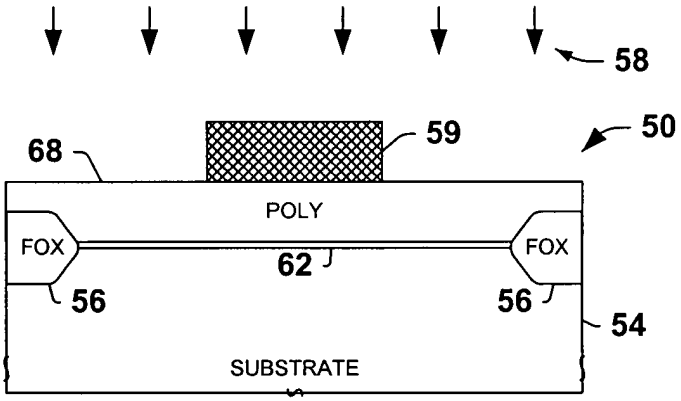

FIG. 2A
(PRIOR ART)

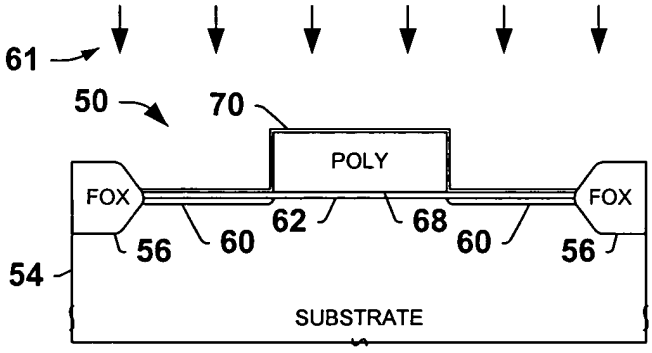

FIG. 2B
(PRIOR ART)

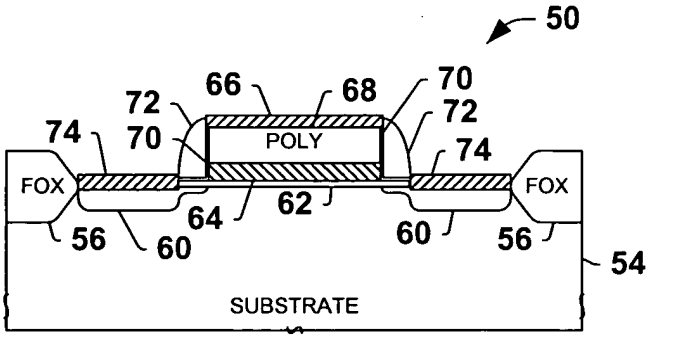

FIG. 2C
(PRIOR ART)

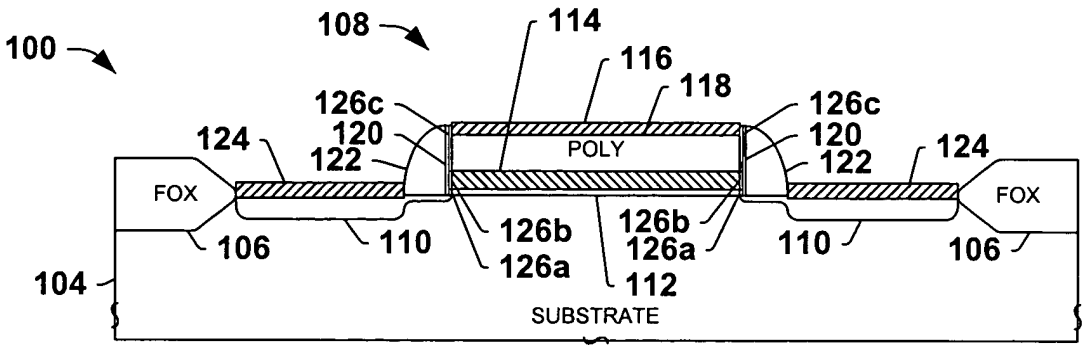
100
108
114
116
118
126c
120
122
124
POLY
FOX
106
110
126b
126a
112
SUBSTRATE
104

FIG. 3

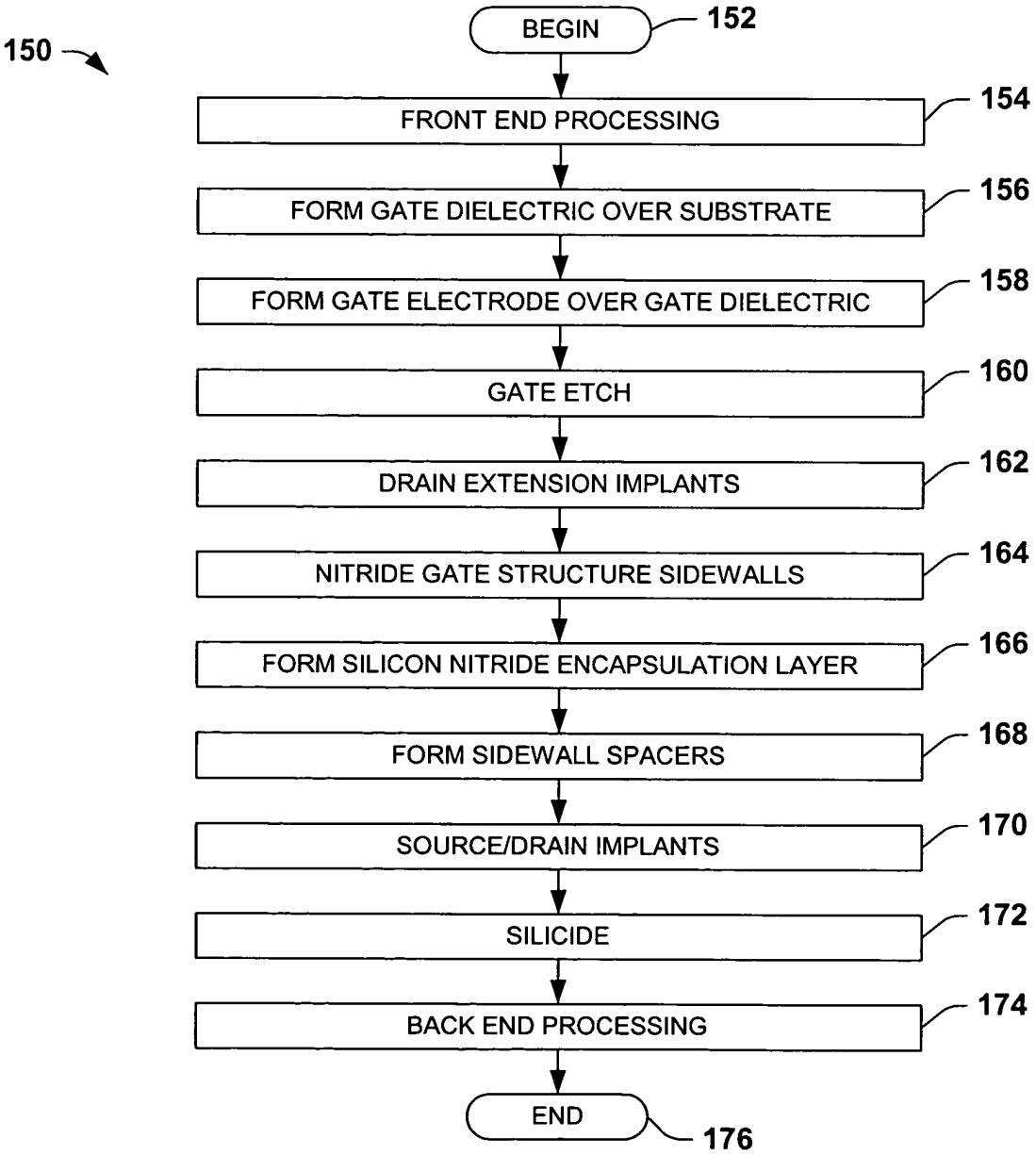
150
BEGIN
152
FRONT END PROCESSING
154
FORM GATE DIELECTRIC OVER SUBSTRATE
156
FORM GATE ELECTRODE OVER GATE DIELECTRIC
158
GATE ETCH
160
DRAIN EXTENSION IMPLANTS
162
NITRIDE GATE STRUCTURE SIDEWALLS
164
FORM SILICON NITRIDE ENCAPSULATION LAYER
166
FORM SIDEWALL SPACERS
168
SOURCE/DRAIN IMPLANTS
170
SILICIDE
172
BACK END PROCESSING
174
END
176

FIG. 4

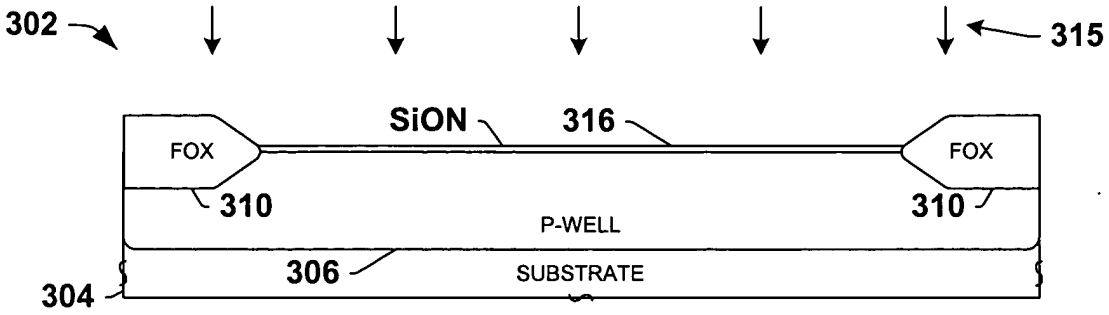

FIG. 5A

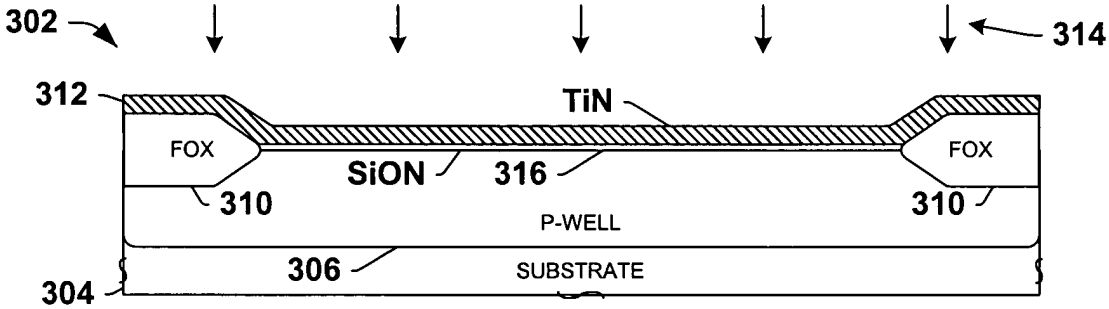

FIG. 5B

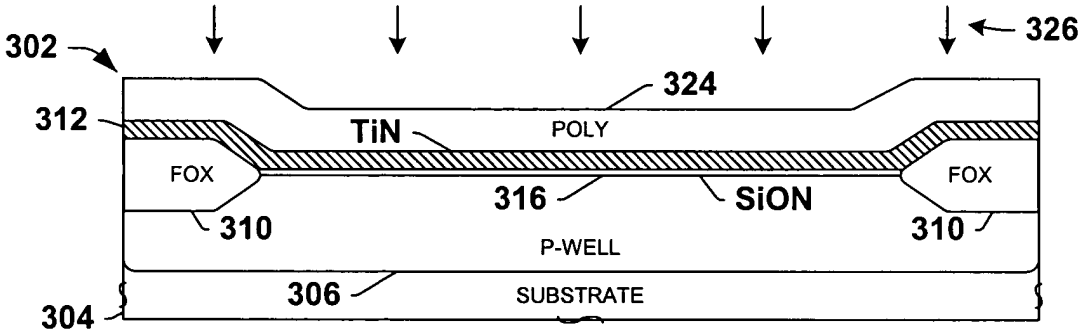

FIG. 5C

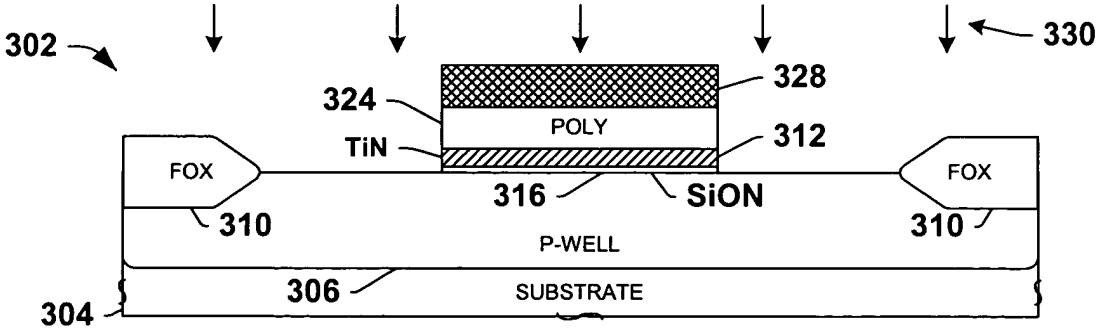

FIG. 5D

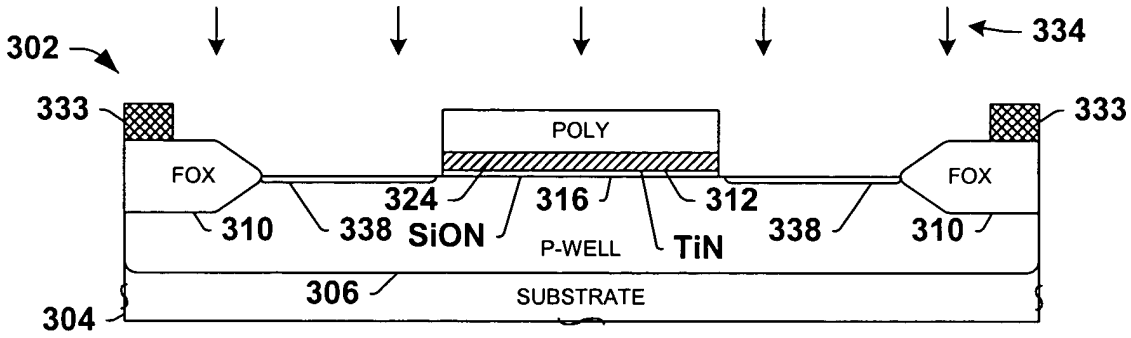

FIG. 5E

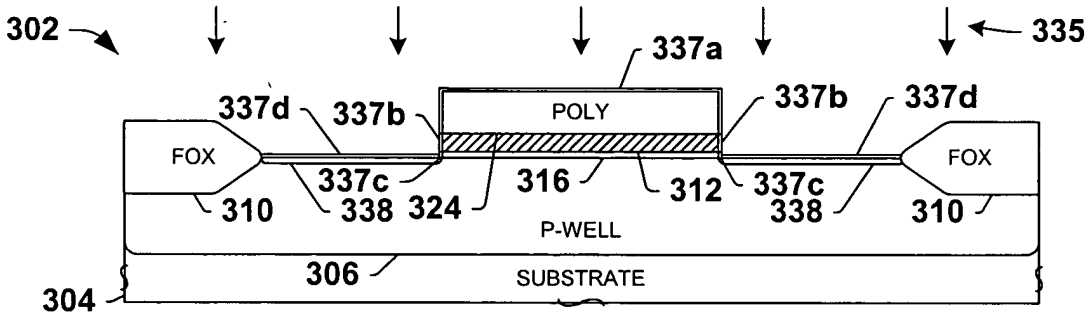

FIG. 5F

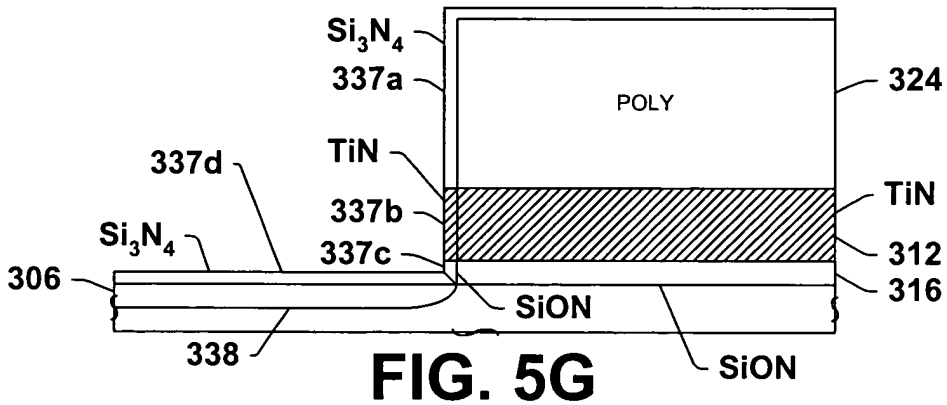

FIG. 5G

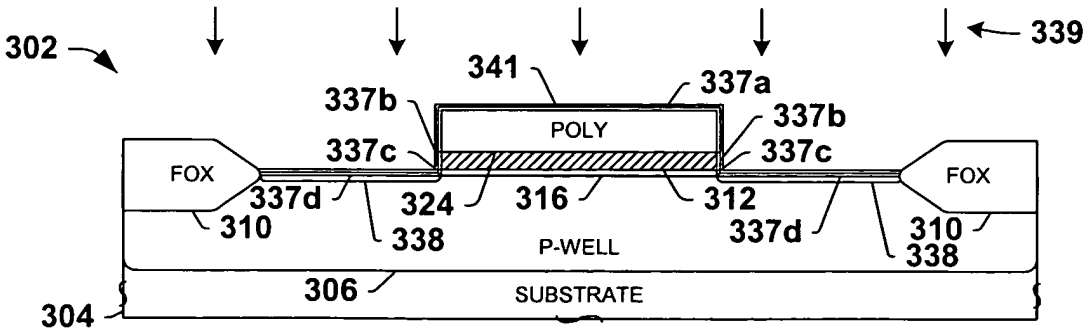

FIG. 5H

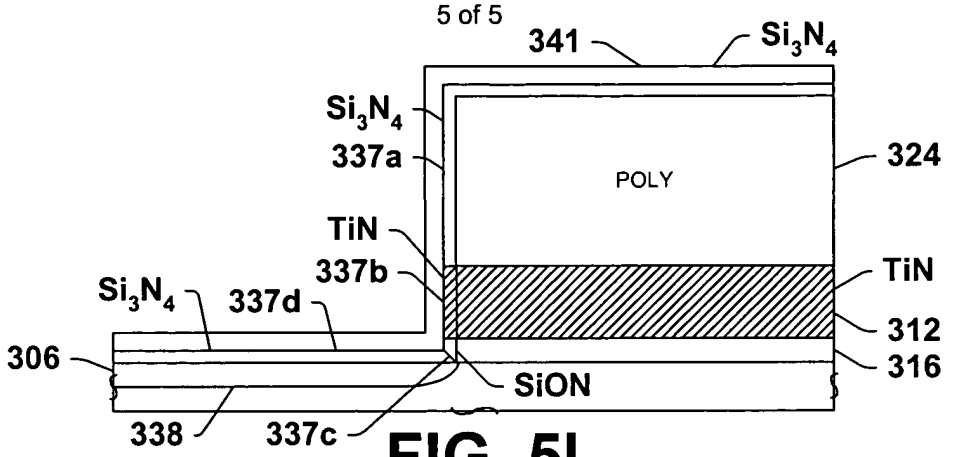

FIG. 5I

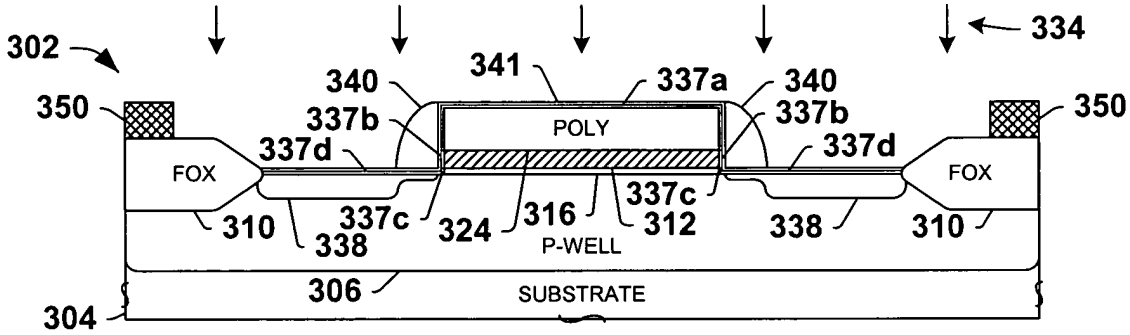

FIG. 5J

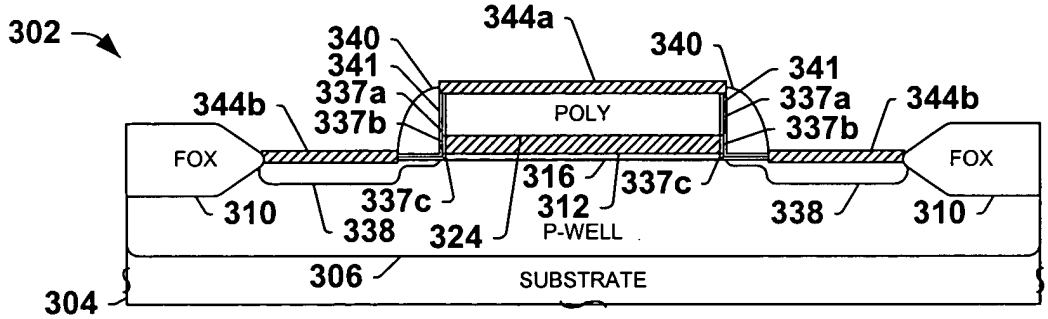

FIG. 5K

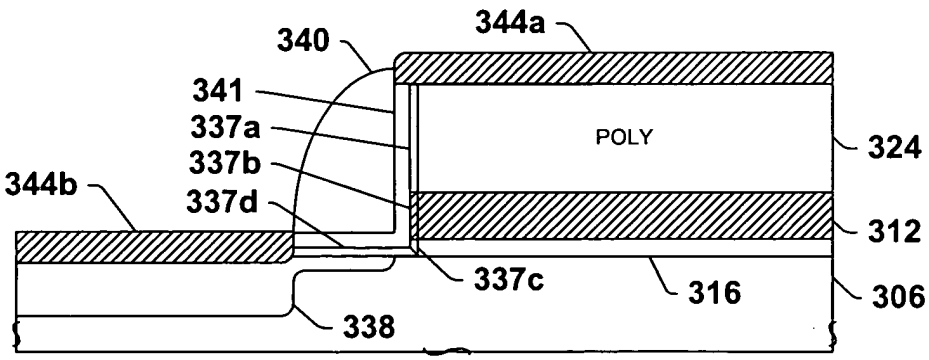

FIG. 5L